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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,330	07/30/2001	Mark A. Kirkpatrick	BS01-084	9174

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EXAMINER	
NGUYEN, TRONG NHAN P	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/916,330	KIRKPATRICK ET AL.	
	Examiner	Art Unit	
	Jack P Nguyen	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to Applicant's amendment filed on 2/7/05. Claims 1-41 are being examined.

Response to Arguments

Applicant's arguments filed on 2/7/05 have been fully considered but they are moot based on new grounds of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 10-11, 19-20, 31-32, 37-38 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Sitaraman et al, 6,718,332 (Sitaraman hereafter).

As per claim 1, Sitaraman teaches a client-server computer system comprising: at least one client application server (16, 18, fig. 1; both source system (16, fig. 1) and target system (18, fig. 1) are client application servers; client application servers contain plurality of applications) that utilizes data in a particular form (first format) and generates

a validation request for validation of the data from the initial form wherein the request includes the data in the initial form (col. 1, lines 60-62; col. 4, lines 44-45, 60-62; source system (16, fig. 1) sends a data validation request (data is in first format) via its source interface (26, fig. 1) to the source data adapter system 'SDA' (20, fig. 1) for validating the data); an application server accessible by a plurality of client application servers via a plurality of application software protocols (col. 4, lines 13-17; *Common Object Request Broker Architecture 'CORBA', Enterprise Application Integration 'EAI', etc. are examples of application software protocols*), wherein said application server provides a data validation service on the data received from the client application server in response to receiving the validation request from the client application server and wherein the data validation service compares the data in the initial form to a reference for the particular form utilized by the client application to determine whether the initial form matches the particular form and returns an indication of valid or invalid based on whether the initial form matches the particular form (col. 4, line 60 – col. 5, line 2; upon receiving the data validation request from the source system, the SDA (20, fig. 1) via its data validator function (82, fig. 1), validates (or checks) to see if the data format is compatible with the reference format; if the data is valid, the system will return a valid response; otherwise, an invalid response will be sent to the client); a storage mass coupled to said application server for storing a system of dynamically maintainable validation functions for performing said validation service (this is an inherent feature of the SDA; validation rules are stored in the database of the SDA for use).

Claim 10 is rejected by similar rationale as claim 1. Sitaraman further discloses means for storing and dynamically maintaining a hierarchically-organized system of a table-based system of validation rules coupled to said means for performing validation services wherein the validation rules are implemented by the means for performing validation services in order to compare the data in the initial form to the reference(see claim 1 rejection; col. 7, lines 11-16; data validator (82, fig. 1) stores validation rules in its tables; data in the database is inherently organized in a hierarchically structure; data validator validates the data to ensure that it is compatible with the reference).

As per claim 19, Sitaraman discloses a system for providing an application service, the system comprising: an application server that receives requests for data validation and that performs data validation to change data to a form other than an initial form and returns an indication of valid or invalid based on whether the initial form of the data matches the reference (see claim 1 rejection); a plurality of applications coupled to the application server, the plurality of applications utilizing the data in a particular form corresponding to the reference and sending the data in the initial form to the application server with the request for data validation (see claim 1 rejection; application servers contain a plurality of applications); one or more application programming interfaces 'API' (each application has an interface that allows it to communicate with other applications), the one or more application programming interfaces for coupling said plurality of applications and said application server and for passing the data validation requests and data via a plurality of computer network protocols (col. 6, lines 33-36; network protocol such as remote access dial-in user service protocol 'RADIUS' may be used by

the applications to initiate data validation requests to be processed by the application server); and at least one dynamically maintainable data schema coupled to said application server for providing access to data validation functions employed by the application server to compare the initial form of the data to the reference (col. 10, lines 32-34; application server stores data in its databases; databases are maintainable).

Claim 31 is rejected by similar rationale as claim 19.

As per claims 37 and 40, Sitaraman discloses a computer-readable medium storing a plurality of instructions adapted to be executed by a processor for providing an application service, the plurality of instructions comprising instructions to: receive a service request from a customer data device, the customer data device including data that is in an initial form to be validated by determining whether the initial form of the data matches a reference corresponding to a particular form utilized by the customer data servcie (see claim 1 rejection; col. 4, lines 60-62; SDA (20, fig. 1) receives data validation request from source interface (26, fig. 1)); generate a service session instruction, the service session instruction based at least in part on the service request (col. 7, lines 6-10; source interface (26, fig. 1) generates service request to send to SDA (20,fig. 1)); send the service session instruction to one or more open application programming interfaces, the service session instruction corresponding to one or more data validation requests from said customer data device (col. 7, lines 6-12; source interface (26, fig. 1) generates service validation request to send to SDA (20,fig. 1) for processing); retrieving a plurality of hierarchical dynamically maintained validation rules from a centralized storage mass coupled to said application server, the validation rules

for comparing the initial data form of the data to the reference (see claim 10 rejection; when the data validator (82, fig. 1) validates the data, it compares the data to the reference to determine if the data is valid or not); perform one or more validation functions based on stored rules in a database by comparing the initial form of the data to the reference (see claim 1 rejection; col. 7, lines 12-16; upon receiving data validation request from client, the SDA, via its data validator process (82, fig. 1) validates the data in accordance to the request); and send a validation service response to the customer data device that includes the indication of valid or invalid based on whether the initial form of the data matched the reference, the validation service response based on the service request (col. 4, line 62 – col. 5, line 2; as the data validator performs the validation service on the data, it returns a valid response when the data is valid; for invalid data, the system returns an invalid response (alert) to the client).

As per claims 2, 11, 20, 32, and 38, Sitaraman discloses storage mass comprises a database (col. 2, line 51).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-9, 12-18, 21-35, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman in view of Whitehead et al, 6,085,030 (Whitehead hereafter).

As per claim 3, Sitaraman does not explicitly disclose validation functions are represented by a storage schema in the form of Lightweight Directory Access Protocol (or LDAP). In a database schema structure, the users can easily access and retrieve data via the use of directory services. Hence, it would have obvious to one of ordinary skill in the art to use a directory service such as LDAP (col. 7, line 66) to access and validate data files stored in the database (see Whitehead disclosure – col. 7, line 66).

As per claims 4-5, Sitaraman does not explicitly disclose database storage schema represented by LDAP represents a table-based system of rules organized into at least three hierarchically organized views. Whitehead discloses a directory service structure (Netware Directory Service 'NDS'; NDS is functionally equivalent to LDAP) that provides a plurality of hierarchically organized views (450, 460, 470, fig. 4B, col. 11, lines 9-16; *component server, description repository container, and description type container represent the hierarchically views in a directory storage schema).* Hence, it would have been obvious to one of ordinary skill in the art to store data broken down by hierarchical views to show the inter-relationships between the data.

As per claims 6-9, Sitaraman not explicitly disclose the application and database structure (represented in the form of LDAP) with hierarchically organized views are dynamically updateable by an external (remote) administrator. Whitehead discloses the database with its directory service can be validated by an external administrator (col.

13, lines 67 – col. 14, lines 7; *administrator can dynamically validate and update all views and their individual components.*) Hence, it would have been obvious to one of ordinary skill in the art to allow remote administration of services because the administrator can administer and update multiple systems that may be at different locations to save on support costs by increasing operational efficiency.

As per claims 12, 21, 33, and 39, they are rejected by similar rationale as claim 3.

As per claims 13-14, 22-23, and 34-35, they are rejected by similar rationale as claims 4-5.

As per claims 15-18, 24-27, they are rejected by similar rationale as claims 6-9.

As per claims 28-29, it is well known in the art that information can be represented by a string of data.

Claims 36 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman in view of Allen et al, 6,078,918 (Allen hereafter).

Claims 36 and 41 are rejected for similar reasons as claims 1 addressed above. Further, Whitehead does not teach data to be validated arranged in the form of hash table and can be updated remotely. However, Allen teaches data is indexed and arranged in the form of a hash table (520, fig. 5C, col. 10, lines 60-62). Hence, it would have been obvious to one of ordinary skill in the art to be motivated modify and combine the teachings of Whitehead and Allen to index data in the form of a hash table to perform quick lookups and searches as disclosed by Allen in [col. 10, lines 65-66] and

provide remote administration capability so the administrator can manage multiple systems located at different locations to save on support costs.

Claims 11-14, 20-23, 32-35, 38-39 are rejected for similar reasons as claims 2-5 addressed above.

Claims 15, 16, 24, and 25 are rejected for similar reasons as claims 6-7 addressed above.

Claims 17, 18, 26 and 27 are rejected for similar reasons as claims 8-9 addressed above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P Nguyen whose telephone number is (571) 272-3945. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn

Dung C. Dinh
Primary Examiner